

Massachusetts Department of Environmental Protection Source Water Assessment and Protection (SWAP) Report for

Winchester Water and Sewer Division

What is SWAP?

The Source Water Assessment and Protection (SWAP) Program, established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the suscepti bility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

Table 1: Public Water System Information

PWS Name	Winchester Water and Sewer Division
PWS Address	15 Lake Street
City/Town	Winchester, MA 01890
PWS ID Number	3344000
Local Contact	Edward Grant
Phone Number	(781) 721-9015

Susceptibility and Water Quality

Susceptibility is a measure of a water supply's potential to become contaminated due to land uses and activities within its recharge area.

A source's susceptibility to contamination does *not* imply poor water quality.

Water suppliers protect drinking water by monitoring for more than 100 chemicals, disinfecting, filtering, or treating water supplies, and using source protection measures to ensure that safe water is delivered to the tap.

Actual water quality is best reflected by the results of regular water tests. To learn more about your water quality, refer to your water supplier's annual Consumer Confidence Reports.

Introduction

We are all concerned about the quality of the water we drink. Drinking water wells may be threatened by many potential contaminant sources, including storm runoff, road salting, and improper disposal of hazardous materials. Citizens and local officials can work together to better protect these drinking water sources.

Purpose of this report:

This report is a planning tool to support local and state efforts to improve water supply protection. By identifying land uses within water supply protection areas that may be potential sources of contamination, the assessment helps focus protection efforts on appropriate best management practices (BMPs) and drinking water source protection measures.

Refer to Table 3 for Recommendations to address potential sources of contamination. Department of Environmental Protection (DEP) staff are available to provide information about funding and other resources that may be available to your community.

This report includes the following sections:

- 1. Description of the Water System
- 2. Land Uses within Protection Areas
- 3. Source Water Protection
- 4. Appendices

Glossary

Aquifer: An underground waterbearing layer of permeable material that will yield water in a usable quantity to a well.

Hydrogeologic Barrier: An underground layer of impermeable material (i.e. clay) that resists penetration by water.

IWPA: A 400-foot to ½ mile radius around a public water supply well proportional to its pumping rate; the area DEP recommends for protection in the absence of a defined Zone II. To determine I WPA radius, refer to the attached map.

Recharge Area: The surface area that contributes water to a well.

Zone I: The area closest to a well; a 100 to 400 foot radius proportional to the well's pumping rate. This area should be owned or controlled by the water supplier and limited to water supply activities.

Zone II: The primary recharge area for the aquifer. This area is defined by hydrogeologic studies that must be approved by DEP. Refer to the attached map to determine the land within your Zone II.

Zone A: is the most critical for protection efforts. It is the area 400 feet from the edge of the reservoir and 200 feet from the edge of the tributaries (rivers and/or streams) draining into it.

Zone B: is the area one-half mile from the edge of the reservoir but does not go beyond the outer edge of the watershed.

Zone C: is the remaining area in the watershed not designated as Zones A or B.

The attached map shows Zone A and your watershed boundary.

Section 1: Description of the Water System

Groundwater Sources				
IWPA Susceptibility: High				
Well Name	Source ID#			
Pond Brook Tubular Wells	3344000-01G			

Surface Water Sources

Source Name	Source ID #	Susceptibility
North Reservoir	3344000-01S	High
Middle Reservoir	3344000-02S	Moderate
South Reservoir	3344000-03S	Moderate

The reservoirs for the Winchester Water and Sewer Division (Winchester) are located within three separate water supply protection areas. The North Reservoir (01S) is located in Winchester and Stoneham, with the water supply protection area located in Winchester, Stoneham, and a small section extending into Medford; the Middle Reservoir (02S) is located in Medford and Stoneham, with the water supply protection area located in Winchester, Stoneham, and Medford; and, the South Reservoir (03S) is located in Medford, with the water supply protection area located in Winchester and Medford, with a small section extending into Stoneham.

The Pond Brook Tubular Wells, which is an inactive source, has an Interim Wellhead Protection Area (IWPA) that is located in Winchester and Woburn. Tubular wells have a Zone I radius of 250 feet. The wells are located in an aquifer with a high vulnerability to contamination due to the absence of hydrogeologic barrier (i.e. confining clay layer) that can prevent contaminant migration. Please refer to the attached map of the IWPA.

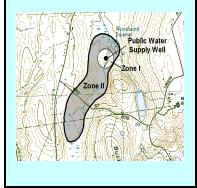
For current information on monitoring results and treatment, please contact the Public Water System contact person listed above in Table 1 for a copy of the most recent Consumer Confidence Report. Drinking water monitoring reporting data is also available on the web at http://www.epa.gov/safewater/ccr1.html

Section 2: Land Uses in the Protection Areas

Winchester watershed lands and IWPA lands are primarily a mixture of forest, and residential land use, with smaller portions consisting of commercial, industrial, and other land uses (refer to attached map for details). Land uses and activities that are potential sources of contamination are listed in Table 2, with further detail provided in the Table of Regulated Facilities and Table of Underground Storage Tanks in Appendix B.

What is a Protection Area?

A well's water supply protection area is the land around the well where protection activities should be focused. Each well has a Zone I protective radius and a Zone II protection area.



Key Land Uses and Protection Issues include:

- 1. Activities in Zone I
- 2. Activities in Zone A
- 3. Residential Land Uses
- 4. Transportation Corridors
- 5. Oil or Hazardous Material Contamination Sites
- 6. Comprehensive Wellhead Protection Planning

The ranking of susceptibility to contamination for the Pond Brook Tubular Wells IWPA and the North Reservoir Zone C is high, based on the presence of at least one high threat land use within the water supply protection areas, as seen in Table 2. The ranking of susceptibility to contamination for the Middle Reservoir Zone C and the South Reservoir Zone C is moderate, based on the presence of at least one moderate threat land use within the water supply protection areas, as seen in Table 2.

1. Activities in Zone I – The Zone I for each of the wells is a 250 foot radius around the wellhead. Massachusetts drinking water regulations (310 CMR 22.00) require public water suppliers to own the Zone I, or control the Zone I through a conservation restriction. Only water supply activities are allo wed in the Zone I. However, many public water supplies were developed prior to the Department's regulations and contain non-water supply activities such as homes

and public roads. The Zone I for Well #1 (01G) is not entirely owned or controlled by the public water supplier, and contains a school, homes, and small sections of local roads.

Zone I Recommendations:

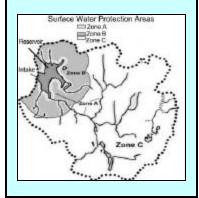
- ✓ To the extent possible, remove all non-water supply activities from the Zone I to comply with DEP's Zone I requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Do not use or store pesticides, fertilizers or road salt within the Zone I.
- ✓ Keep any new non-water supply activities out of the Zone I.
- **2. Activities in Zone As -** Land use activities within the Winchester North Reservoir Zone A which, if managed improperly, may have an impact on the surface water source include: truck rental facility, homes, residential storage of heating oil, local roads, and stormwater runoff. Wild animals and domestic pets can be carriers of waterborne diseases such as Giardia, Cryptosporidium, Salmonella, etc.

Zone A Recommendations:

- ✓ To the extent possible, remove all activities from the Zone As to comply with DEP's Zone A requirements.
- ✓ Use BMPs for the storage, use, and disposal of hazardous materials such as water supply chemicals and maintenance chemicals.
- ✓ Storage of pesticides, fertilizers or road salt within the Zone A should be covered and contained.
- ✓ Keep any new prohibited activities out of the Zone A.
- **3. Residential Land Uses** Approximately 56% of Winchester's combined IWPA and watershed lands consist of residential areas. Most of the areas have public sewers, and a very small portion still has on-site septic systems. If managed improperly, activities associated with residential areas can contribute to drinking water contamination. Common potential sources of contamination include:

What is a Watershed?

A watershed is the land area that catches and drains rainwater down-slope into a river, lake or reservoir. As water travels down from the watershed area it may carry contaminants from the watershed to the drinking water supply source. For protection purposes, watersheds are divided into protection Zones A. B and C.



- Septic Systems Improper disposal of household hazardous chemicals to septic systems is a potential source of contamination to the groundwater because septic systems lead to the ground. If septic systems fail or are not properly maintained, they can be a potential source of microbial contamination.
- Household Hazardous Materials Hazardous materials may include
 automotive wastes, paints, solvents,
 pesticides, fertilizers, and other substances.
 Improper use, storage, and disposal of
 chemical products used in homes are
 potential sources of contamination.
- Heating Oil Storage If managed improperly, Underground and Aboveground Storage Tanks (USTs and ASTs) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
- Stormwater Catch basins transport stormwater from roadways and adjacent properties to the ground. As flowing stormwater travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from automotive leaks, maintenance, washing, or accidents.

When you fertilize the lawn, <u>Remember</u> you're not *just* fertilizing the lawn.



It's hard to imagine that a green, flourishing lawn could pose a threat to the environment, but the fertilizers you apply to your lawn are potential pollutants! If applied improperly or in excess, fertilizer can be washed off your properly and end up in lakes and streams. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use sparingly.



Residential Land Use Recommendations:

- ✓ Educate residents on best management practices (BMPs) for protecting water supplies. Distribute the fact sheet "Residents Protect Drinking Water" available in Appendix A and on www.mass.gov/dep/brp/dws/protect.htm, which provides BMPs for common residential issues.
- ✓ Work with planners to control new residential developments in the water supply protection areas.
- **4. Transportation Corridors** Transportation corridors and other paved and unpaved local roads cross through the water supply protection areas. Spills from vehicular accidents are a major concern. In addition, roadway construction, maintenance, and typical highway use can all be potential sources of contamination.

Accidents can lead to spills of gasoline and other potentially dangerous transported chemicals. Roadways are frequent sites for illegal dumping of hazardous or other potentially harmful wastes. De-icing salt, automotive chemicals and other debris on roads are picked up by stormwater and wash into catch basins.

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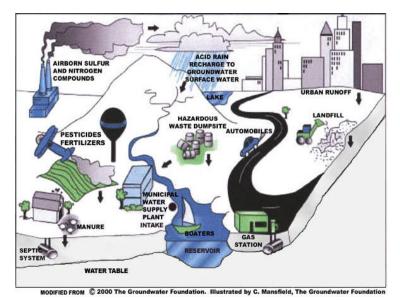


Figure 1: Sample watershed with examples of potential sources of contami-

Potential Source of Contamination vs. Actual Contamination

The activities listed in Table 2 are those that typically use, produce, or store contaminants of concern, which, <u>if managed improperly</u>, are potential sources of contamination (PSC).

It is important to understand that a release may never occur from the potential source of contamination provided facilities are using best management practices (BMPs). If BMPs are in place, the actual risk may be lower than the threat ranking identified in Table 2. Many potential sources of contamination are regulated at the federal, state and/or local levels, to further reduce the risk.

Table 2: Land Use in the Water Supply Protection Areas

For more information, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area

Land Uses	Quantity	Threat	IWPA Source ID#	Zone C Source ID#	Potential Contaminant Sources*
Commercial					
Car/Truck/Bus Washes	1	L	01G	-	Improper management of vehicle wash water; soaps; oils; greases; metals; salts
Service Stations/ Auto Repair Shops	2	Н	01G	-	Spills, leaks, or improper handling of automotive fluids, and solvents
Bus and Truck Terminals	1	Н	-	01S	Spills, leaks, or improper handling of fuels and maintenance chemicals
Dry Cleaners	1	Н	01G	-	Spills, leaks, or improper handling of solvents and wastes
Residential					
Fuel Oil Storage (at residences)	1	M	01G	01S, 02S, 03S	Fuel oil: spills, leaks, or improper handling
Lawn Care/ Gardening	Numerous	M	01G	01S, 02S, 03S	Pesticides: over-application or improper storage and disposal
Septic Systems/ Cesspools	Few	M	01G	01S, 02S, 03S	Hazardous chemicals: microbial contaminants, and improper disposal
Miscellaneous					
Aquatic Wildlife and Pet Waste	Numerous	L	-	01S, 02S, 03S	Microbial contaminants
NPDES Locations	1	L	-	01S	Improper disposal of hazardous material and wastes
Oil or Hazardous Material Sites	2	-	01G		Tier Classified Oil or Hazardous Materials Sites are not ranked due to their site-specific character. Individual sites are identified in Appendix B.
Small Quantity Hazardous Waste Generators	2	М	01G	01S	Spills, leaks, or improper handling or storage of hazardous materials and waste
Stormwater Drains/ Retention Basins	Several/0	L	01G	01S	Debris, pet waste, and chemicals in stormwater from roads, parking lots, and lawns
Transmission Line Rights-of-Way: electric	1	L	01G	-	Construction and corridor maintenance, over- application or improper handling of herbicides

Land Uses	Quantity	Threat	IWPA Source ID#	Zone C Source ID#	Potential Contaminant Sources*
Miscellaneous					
Transportation Corridors	1	М	-	01S	Accidental leaks or spills of fuels and other hazardous materials, over-application or improper handling of pesticides
Underground Storage Tanks	8	M	01G	01S	Spills, leaks, or improper handling or storage of hazardous materials and waste
Utility Substation Transformers	1	L	01G	-	Spills, leaks, or improper handling of chemicals and other materials including PCBs
Very Small Quantity Hazardous Waste Generators	2	L	01G	01S	Spills, leaks, or improper handling or storage of hazardous materials and waste
Water Treatment Sludge Lagoons	2	L	-	01S	Sludge and wastewater: improper management

Table Notes:

- 1. When specific potential contaminants are not known, typical potential contaminants or activities for that type of land use are listed. Facilities within the watershed may not contain all of these potential contaminant sources, may contain other potential contaminant sources, or may use Best Management Practices to prevent contaminants from reaching drinking water supplies.
- 2. For more information on regulated facilities, refer to Appendix B: Regulated Facilities within the Water Supply Protection Area information about these potential sources of contamination.
- 3. For information about Oil or Hazardous Materials Sites in your protection areas, refer to Appendix C: Tier Classified Oil and/or Hazardous Material Sites.
- THREAT RANKING Where there are two rankings, the first is for surface water, the second for groundwater sources. The rankings (high, moderate or low) represent the relative threat of each land use compared to other PSCs. The ranking of a particular PSC is based on a number of factors, including: the type and quantity of chemicals typically used or generated by the PSC; the characteristics of the contaminants (such as toxicity, environmental fate and transport); and the behavior and mobility of the pollutants in soils and groundwater.

(Continued from page 4)

Transportation Corridor Recommendations:

- ✓ Wherever possible, ensure that drains discharge stormwater outside of the Zone I.
- ✓ Identify stormwater drainage systems along transportation corridors. If maps aren't yet available, work with town officials to investigate mapping options such as the upcoming Phase II Stormwater Rule requiring some communities to complete stormwater mapping.
- ✓ Work with local emergency response teams to ensure that any spills within the Zone II can be effectively contained. Review storm drainage maps with emergency response teams.
- ✓ Work with the Town and State to best manage stormwater in the Zone II. Best management practices include street sweeping, vegetative swales, and regular catch basin inspection, cleaning and maintenance.
- **5.** Presence of Oil or Hazardous Material Contamination Site The IWPA contains MADEP Tier Classified Oil and/or Hazardous Material Release Sites indicated on the map as Release Tracking Number 3-0013604 and 3-0018820. Refer to the attached map and Appendix C for more information.

Oil or Hazardous Material Contamination Sites Recommendation:

Monitor progress on any ongoing remedial action conducted for the known contamination sites.

What are "BMPs?"

Best Management Practices (BMPs) are measures that are used to protect and improve surface water and groundwater quality. BMPs can be <u>structural</u>, such as oil & grease trap catch basins, <u>nonstructural</u>, such as hazardous waste collection days or <u>managerial</u>, such as employee training on proper disposal procedures.

6. Protection Planning – Protection planning protects drinking water by managing the land area that supplies water to a well or reservoir. Currently, the Town of Winchester does not have water supply protection controls that meet DEP's Wellhead Protection regulations 310 CMR 22.21(2) and DEP's Surface Water Protection regulations 310 CMR 22.20 (b) and (c). Wellhead Protection and Surface Water Supply Protection Plans coordinate community efforts, identifies protection strategies, establishes a timeframe for implementation, and provides a forum for public participation. There are resources available to help communities develop plans for protecting drinking water supply sources.

Protection Planning Recommendations:

- ✓ Develop and implement Surface Water Supply and Wellhead Protection Plans. Refer your protection team to http://mass.gov/dep/brp/dws/protect.htm for a copy of DEP's guidance on developing plans.
- ✓ If your local surface water supply protection controls do not meet the current regulations, coordinate efforts with local officials to adopt local water supply protection controls that meet current MA regulations 310 CMR 22.21(2) and 310 CMR 22.20 (b) and (c). For more information on DEP land use controls see http://mass.gov/dep/brp/dws/protect.htm.

When you wash your car in the driveway, <u>Remember</u> you're not just washing your car in the driveway.

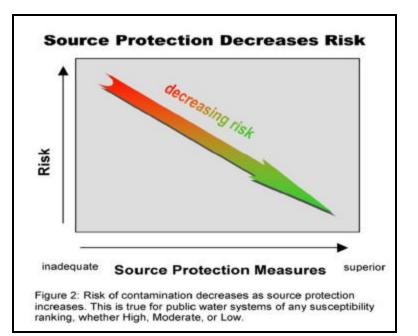


All the soap, scum, and oily grit runs along the curb. Then into a storm drain and directly into our lakes, rivers, and streams. And that causes pollution which is unhealthy for everyone. So how do you avoid this whole mess? Easy! Wash your car on the grass or gravel instead of the street. Or better yet, take it to a car wash where the water gets treated or recycled.

The Mateurchizeds Department of Environmental Protection One Water Street Beston, MA 42208

- ✓ If local controls do not regulate floor drains, be sure to include floor drain controls that meet 310 CMR 22.21(2).
- ✓ Work with town boards to review and provide recommendations on proposed development within your water supply protection areas. To obtain information on build-out analyses for the town, see the Executive Office of Environmental Affairs' community preservation web site, http://commpres.env.state.ma.us/.

Other land uses and activities within the IWPA and watershed that are potential sources of contamination are included in Table 2. Refer to Appendix B for more information about these land uses. Identifying potential sources of contamination is an important initial step in protecting your drinking water sources. Further local investigation will provide more in-depth information and may identify new land uses and activities that are potential sources of contamination. Once potential sources of contamination are identified, specific recommendations like those below should be used to better protect your water supply.



Section 3: Source Water Protection Conclusions and Recommendations

Current Land Uses and Source Protection:

As with many water supply protection areas, Winchester's IWPA and watersheds contain potential sources of contamination. However, source protection measures reduce the risk of actual contamination, as illustrated in Figure 2. The water supplier is commended for taking an active role in promoting source protection measures in the Water Supply Protection Areas through:

- Support from municipality on land use activities within watersheds
- Controlling access to the reservoirs and watershed
- Ownership of a large percentage of the watershed by Winchester and MDC

Source Protection Recommendations:

To better protect the sources for the future:

- ✓ Educate residents on ways they can help you to protect drinking water sources
- ✓ Inspect the Zone Is and As regularly, and when feasible, remove any non-water supply activities.
- ✓ Work with emergency response teams to ensure that they are aware of the stormwater drainage in your Zone II and to cooperate on responding to spills or accidents.
- ✓ Partner with local businesses to ensure the proper storage, handling, and disposal of hazardous materials.
- ✓ Monitor progress on any ongoing remedial action conducted for the known oil or contamination sites.
- ✓ Develop and implement a Wellhead and Surface Water Protection Plan.

What is a Zone III?

A Zone III (the secondary recharge area) is the land beyond the Zone II from which surface and ground water drain to the Zone II and is often coincident with the watershed boundary.

The Zone III is defined as a secondary recharge area for one or both of the following reasons:

- 1. The low permeability of underground water bearing materials in this area significantly reduces the rate of groundwater and potential contaminant flow to the Zone II.
- 2. The groundwater in this area probably discharges to surface water feature such as a river rather than discharging directly into the aquifer.

The land uses within the Zone III are assessed only for sources that are shown to be groundwater under the direct influence of surface water.

Top 5 Reasons to Develop a Local Wellhead and Surface Water Protection Plan

- Reduces Risk to Human Health
- **②** Cost Effective! Reduces or Eliminates Costs Associated With:
- Increased monitoring and treatment
- Water supply clean up and remediation
- Replacing a water supply
- · Purchasing water
- Supports municipal bylaws, making them less likely to be challenged
- Ensures clean drinking water supplies for future generations
- Enhances real estate values clean drinking water is a local amenity. A community known for its great drinking water in a place people want to live and businesses want to locate.

Conclusions:

These recommendations are only part of your ongoing local drinking water source protection. Additional source protection recommendations are listed in Table 3, the Key Issues above, and Appendix A.

DEP staff, informational documents, and resources are available to help you build on this SWAP report as you continue to improve drinking water protection in your community. Grants and loans are available through the Drinking Water State Revolving Loan Fund, the Clean Water State Revolving Fund, and other sources. For more information on grants and loans, visit the Bureau of Resource Protection's Municipal Services web site at: http://mass.gov/dep/brp/mf/mfpubs.

The assessment and protection recommendations in this SWAP report are provided as a tool to encourage community discussion, support ongoing source protection efforts, and help set local drinking water protection priorities. Citizens and community officials should use this SWAP report to spur discussion of local drinking water protection measures. The water supplier should supplement this SWAP report with local information on potential sources of contamination and land uses. Local information should be maintained and updated periodically to reflect land use changes in the watersheds. Use this information to set priorities, target inspections, focus education efforts, and to develop a long-term drinking water source protection plan.

Table 3: Current Protection and Recommendations

Protection Measures	Status	Recommendations					
Zone I and Zone A							
Does the Public Water Supplier	YES (Zone A for Middle and South Reservoirs)	Follow Best Management Practices (BMPs) that focus on good housekeeping, spill prevention, and operational practices to reduce the use and release of hazardous materials.					
(PWS) own or control the entire Zone I and/or Zone A?	NO (Zone I for Pond Brook Tubular Wells and Zone A for North Reservoir)	To the extent possible, remove prohibited activities in Zone A to comply with DEP's Zone A requirements. Investigate options for gaining ownership or control of the Zone A.					
Are the Zone I and Zone A posted with "Public Drinking Water	YES	Additional economical signs are available from the Northeast Rural Water Association (802) 660-4988.					
Supply" Signs?	NO (Zone I for Pond Brook Tubular Wells)	Post Zone I until such time that this well field is officially abandoned.					
Are the Zone I and Zone A	YES	Continue daily inspections of drinking water protection areas.					
regularly inspected?	NO (Zone I for Pond Brook Tubular Wells)	Monitor activities in drinking water protection areas.					
Are water supply-related activities the only activities within the Zone I	YES (Zone A for Middle and South Reservoirs)	Monitor for any non-water supply activities in Zone I and prohibited activities in Zone A, and investigate options for removing these activities.					
and Zone A?	NO (Zone I for Pond Brook Tubular Wells and Zone A for North Reservoir)	Monitor prohibited activities in Zone I and Zone A, and investigate options for removing these activities.					
Municipal Controls (Zoning Bylaw	s, Health Regulations, and General Bylaws)						
Does the municipality have Surface Water Protection Controls that meet 310 CMR 22.20C and Wellhead Protection Controls that meet 310 CMR 22.21(2)?	NO	Work with the Planning Board and the Board of Selectmen to compare land use controls to see that they meet current requirements of 310 CMR 22.21(2) and 310 CMR 22.20C. Refer to mass.gov/dep/brp/dws/ for model bylaws and health regulations, and current regulations.					
Do neighboring communities protect the water supply protection areas extending into their communities?	NO	Work with the communities of Medford, Stoneham, and Woburn to encourage them to protect watershed and IWPA lands.					
Planning							
Does the PWS have a local surface water and wellhead protection plan?	NO	Develop and implement a surface water supply and wellhead protection plan. Follow "Developing a Local Wellhead Protection Plan" and "Developing a Local Surface Water Supply Protection Plan" available at: www.state.ma.us/dep/brp/dws/.					
Does the PWS have a formal "Emergency Response Plan" to deal with spills or other emergencies?	YES	Supplement plan by developing a joint emergency response plan with fire department, Board of Health, DPW, and local and state emergency officials. Coordinate emergency response drills with local teams.					
Does the municipality have a watershed and wellhead protection committee?	YES (Board of Selectmen)	Encourage committee to include representatives from citizens' groups, neighboring communities, and the business community.					
Does the Board of Health conduct inspections of commercial and industrial activities?	UNKNOWN	For more guidance see "Hazardous Materials Management: A Community's Guide" at www.state.ma. us/dep/brp/dws/files/hazmat.doc					
Does the PWS provide watershed protection education?	YES (through MWRA)	Increase residential outreach through bill stuffers, school programs, Drinking Water Week activities, and coordination with local groups. Aim additional efforts at commercial uses within the IWPA and watershed.					

Section 4: Appendices

- A. Protection Recommendations
- B. Regulated Facilities within the Water Supply Protection Area
- C. Table of Tier Classified Oil and/or Hazardous Material Sites within the Water Supply Protection Areas
- D. Additional Documents on Source Protection

Additional Documents:

To help with source protection efforts, more information is available by request or online at www.state.ma.us/dep/brp/dws including:

- 1. Water Supply Protection Guidance Materials such as model regulations, Best Management Practice information, and general water supply protection information.
- 2. MA DEP SWAP Strategy
- 3. Land Use Pollution Potential Matrix
- 4. Draft Land/Associated Contaminants Matrix

For More Information

Contact Anita Wolovick in DEP's Wilmington Office at (978) 661-7768 for more information and assistance on improving current protection measures.

Copies of this report have been provided to the public water supplier, town boards, and the local media.

APPENDIX A: DEP PERMITTED FACILITIES WITHIN WINCHESTER WATER SUPPLY PROTECTION AREAS

DEP FACILITY NUMBER	FACILITY NAME	STREET ADDRESS	TOWN	PERMITTED ACTIVITY	ACTIVITY CLASS
26339	AW CHESTERTON CO	225 FALLON RD	STONEHAM	HANDLR	SMALL QUANTITY GENERATOR RCRA HAZARDOUS WASTE
26339	AW CHESTERTON CO	225 FALLON RD	STONEHAM	PLANT	BELOW AQ REGULATED THRESHOLDS
248828	RYDER TRUCK RENTAL INC	150 FALLON RD	STONEHAM	HANDLR	VERY SMALL QUANTITY GENERATOR RCRA HAZARDOUS WASTE
248828	RYDER TRUCK RENTAL INC	150 FALLON RD	STONEHAM	FULDSP	FUEL DISPENSER STAGEII
282885	GEI CONSULTANTS INC	1021 MAIN ST	WINCHESTER	DISCH	MWRA SEWER CONNECTION
209660	OKEEFFE CITGO SERVICE INC	1012 MAIN ST	WINCHESTER	FULDSP	FUEL DISPENSER
326744	ROYAL DRY CLEANERS	889 MAIN ST	WINCHESTER	HANDLR	VERY SMALL QUANTITY GENERATOR OF HAZ WASTE
287907	GARYS AUTOMOTIVE AND PERFORMANCE	75 MAIN ST	WOBURN	HANDLR	VERY SMALL QUANTITY GENERATOR OF HAZ WASTE
286355	WOBURN CAR WASH INC	75 MAIN ST	WOBURN	HANDLR	SMALL QUANTITY GENERATOR OF WASTE OIL OR PCBS

UNDERGROUND STORAGE TANKS WITHIN WINCHESTER WATER SUPPLY PROTECTION AREAS

FACILITY NAME	ADDRESS	TOWN	DESCRIPTION	CAPACITY (GAL)	CONTENTS
RYDER TRANSPORTATION SERV	150 FALLON RD	STONEHAM	TRUCK/TRANSPORT	4000	LUBE OIL
RYDER TRANSPORTATION SERV	150 FALLON RD	STONEHAM	TRUCK/TRANSPORT	4000	WASTE OIL
RYDER TRANSPORTATION SERV	150 FALLON RD	STONEHAM	TRUCK/TRANSPORT	20000	DIESEL
RYDER TRANSPORTATION SERV	150 FALLON RD	STONEHAM	TRUCK/TRANSPORT	10000	GASOLINE
O'KEEFFE CITGO SERVICE INC	1012 MAIN ST	WINCHESTER	SERVICE STATION	20000	GASOLINE
VERIZON MASSACHUSETTS	954 MAIN ST	WINCHESTER	UTILITIES	2000	DIESEL
VERIZON MASSACHUSETTS	954 MAIN ST	WINCHESTER	UTILITIES	4000	DIESEL
WOBURN CAR WASH INC	75 MAIN ST	WOBURN	GAS STATION	10000	GASOLINE
WOBURN CAR WASH INC	75 MAIN ST	WOBURN	GAS STATION	10000	GASOLINE

For More Information On Underground Storage Tanks, Visit The Massachusetts Department Of Fire Services Web Site: http://www.State.Ma.Us/Dfs/Ust/Usthome.Htm

Note: This Appendix Includes Only Those Facilities Within The Water Supply Protection Area(S) That Meet State Reporting Requirements And Report To The Appropriate Agencies. Additional Facilities Located Within The Water Supply Protection Area(S) Should Be Considered In Local Drinking Water Source Protection Planning.

APPENDIX B – Table of Tier Classified Oil and/or Hazardous Material Sites within Winchester Water Supply Protection Areas

DEP's datalayer depicting oil and/or hazardous material (OHM) sites is a statewide point data set that contains the approximate location of known sources of contamination that have been both reported and classified under Chapter 21E of the Massachusetts General Laws. Location types presented in the layer include the approximate center of the site, the center of the building on the property where the release occurred, the source of contamination, or the location of an on-site monitoring well. Although this assessment identifies OHM sites near the source of your drinking water, the risks to the source posed by each site may be different. The kind of contaminant and the local geology may have an effect on whether the site poses an actual or potential threat to the source.

The DEP's Chapter 21E program relies on licensed site professionals (LSPs) to oversee cleanups at most sites, while the DEP's Bureau of Waste Site Cleanup (BWSC) program retains oversight at the most serious sites. This privatized program obliges potentially responsible parties and LSPs to comply with DEP regulations (the Massachusetts Contingency Plan – MCP), which require that sites within drinking water source protection areas be cleaned up to drinking water standards.

For more information about the state's OHM site cleanup process to which these sites are subject and how this complements the drinking water protection program, please visit the BWSC web page at http://www.state.ma.us/dep/bwsc. You may obtain site -specific information two ways: by using the BWSC Searchable Sites database at http://:www.state.ma.us/dep/bwsc/sitellst.htm, or you may visit the DEP regional office and review the site file. These files contain more detailed information, including cleanup status, site history, contamination levels, maps, correspondence and investigation reports, however you must call the regional office in order to schedule an appointment to view the file.

The table below contains the list of Tier Classified oil and/or Hazardous Material Release Sites that are located within your drinking water source protection area.

Table 1: Bureau of Waste Site Cleanup Tier Classified Oil and/or Hazardous Material Release Sites (Chapter 21E Sites) - Listed by Release Tracking Number (RTN).

RTN	Release Site Address	Town	Contaminant Type
3-0013604	75 Main St	Woburn	Oil And Hazardous Material
3-0018820	71 Main St	Woburn	Oil

For more location information, please see the attached map. The map lists the release sites by Release Tracking Number (RTN).